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Remarks:

Regarding the objections to the claims:

The claims have been amended to address the specific objections raised by the Examiner.

Regarding the rejection of claims 3, 16 and 17 under 35 USC 112, 2nd paragraph:

The applicant respectfully traverses the Examiner's rejection of claim 3 and 16 with regard to "...a part wetted in use by liquid dispensed from the distal end ..." present in the respective claims. The applicant provides in the application numerous examples of what such a "part" may be, e.g., at the following passages of applicant's published specification, US 2007/0204387 A1 which is referred to for sake of convenient reference.

[0052] When the device is to be used for delivering a liquid into the bowl of a toilet the liquid delivery means may be provided with a means for preventing dripping of cleaning liquid from the distal end, into the bowl. Such means may be, for example, an absorbent part, for example a sintered plastics material, or fibrous material, or foam material. Alternatively the arrangement may be such that drip-

as well as,

[0053] Such a part may also be used as a vapour emanator in other embodiments, in which a volatile liquid issues from the distal end of the liquid delivery means. In some embodiments such a part may line a partially open box within which the device is located, in use.

It is the applicant's view that ample support for such a "part" which may be wetted in use by a liquid dispensed from the distal end is disclosed in applicant's specification. Further the Examiner's attention is directed to Fig. 5, and the "absorbent material 38" which is illustrated as one of a number of possible embodiments for the "part" recited in claims 3 and 16. The applicant also point out that a "part" may also include a portion or section of the tube 12, especially in the locus of the distal end 16 thereof or may be a further emanator, as is disclosed by the applicant in the following part of the specification, namely in the following:

[0085] The distal end 16 of the capillary tube may be of plain form, as shown (that is, no different from any other portion of the capillary tube) or may terminate in an ema-

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nator from which the liquid evaporates, or it may drip liquid onto a separate emanator from which the liquid evaporates. A suitable emanator may for example comprise a sintered ceramic or plastics block, a fibrous wad, a fabric, or a foam pad. A suitable emanator may, for example, comprise a sintered ceramic or plastics block, a fibrous wad, a fabric, or a foam pad.

In view of the foregoing, reconsideration of the propriety of the rejection of claims 3 and 16, and withdrawal of the rejection is solicited.

With respect now to the rejection lodged against claim 17, the applicant traverses the Examiner's rejection. It is the applicant's position that the application provides sufficient disclosure whereby a skilled artisan, guided by the applicant's specification would without undue experimentation would readily determine the identity of materials which could be used, and which would be of the type which would not "dry out" and provide a deleterious effect to applicant's claimed device.

The applicant notes in their specification that:

[0054] Preferably the liquid within the reservoir is of a type which does not evaporate to leave crystalline material or other solid residue. Preferably it does not dry out. Most preferably it contains a humectant.

which is believed to be readily determinable by at most, simple and routine experiments with an actual sample of a device in order to determine if the selected liquid leads to such undesired crystallization nor deposition of residues such that the symphonic-action of the elongate liquid delivery means is unduly affected. Applicant provides several non-limiting examples of suitable liquids, as recited in the following paragraphs of applicant's specification:

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[0077] In one experiment the solution to be delivered was a 2% w/w solution of a sodium alginate, PROTANAL LF 20/40 available from FMC Biopolymer of Drammen, Norway. This was added to the deionized water, and stirred until the PROTANAL was in solution. Its viscosity was 889 mPas. 50 ml of the solution was poured into a reservoir. The internal diameter of the silicone plastics delivery tube was 1 mm and the initial pressure head—the difference in height between the liquid level and the tube outlet—was 90 mm. It was found that the reservoir took 163 hours to empty. In contrast, with deionized water—of viscosity 1 mPas—the reservoir took 20 minutes to empty.

and,

[0078] In another experiment a 1% w/w solution of PROTANAL LF 20/40 was made as described above. Its viscosity was 117 mPas. A silicone plastics delivery tube of internal diameter 0.5 mm was used. When the initial pressure head was 150 mm the reservoir took 195 hours to empty. When the initial pressure head was 100 mm the reservoir took 15 days to empty.

The foregoing provide two non-limiting examples of the compositions of, and fluid characteristics which are exemplary and useful certain preferred embodiments of applicant's invention. It is believed that in view of the foregoing disclosure in applicant's specification, further in view of the relative level of skill in the art and the relative ease in predicting and/or determining by a limited amount of routine tests, the suitability of the utility of a liquid composition may be easily ascertained. See *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970), *In re Wands*, 858 F.2d at 737, 8 USPQ2d at 1404.

Accordingly, reconsideration of the propriety of the rejection of claim 17 and its withdrawal is solicited.

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Regarding the rejection of claims 1-3, 5-16 and 18 under 35 USC 103(a) in view of US 954426 to Dreifuss (hereinafter simply "Dreifuss"), in view of US 5457822 to Klammsteiner (hereinafter simply "Klammsteiner") and US 2760209 to Ewing et al (hereinafter simply "Ewing"):

The applicant traverses the Examiner's rejection of the indicated claims in view of the primary Dreifuss reference, in view of the secondary Klammsteiner and Ewing references.

The applicant strongly traverses the Examiner's characterization of the Dreifuss reference and the Examiner's remarks at page 3 of the Office Action that Dreifuss discloses "a syphonic-action elongated liquid delivery means" would render obvious the applicants currently claimed invention. Looking closely at Dreifuss, is evident that Dreifuss fails to provide an element which provides true syphonic-action between the proximal and distal end of his liquid delivery means. Rather, Dreifuss provides it best (i) a wick 24 which can entrain and transport a limited amount of a liquid disinfectant present within his receptacle 19, and (ii) a second, separate tube 22 through which should be limited amount of liquid disinfectant can slowly dripped downwardly, but this continuously, threw said to 22 ultimately to a toilet. Clearly then, there is no continuous siphon arrangement established between the source of the supply of the liquid disinfectant, namely the receptacle 19 and the ultimate exit of the tube 22. This is realized due to the fact that a skilled artisan would recognize that the fluid dynamics of a wick such as wick 24 would provide a means to support for capillary flow of a liquid through the wick however come at the same time due to keep hacking and fibrous nature of such a wick would also substantially limit the quantity of such a liquid passing therethrough. From the foregoing, would also be recognized from a review of the specification and in particular the figures in Dreifuss that the interface or the juncture between the end of the wick 24 and the connection with the upper end of the tube 22 would also define the end of any alleged siphon as provided by Dreifuss. The same skilled artisan would also realize that

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the relatively unimpeded internal bore of the tube 22 provided at the terminal end of the wick 24 would also provide for unimpeded flow of any liquid being supplied thereto. Tube 22 would only function as a downspout or a tube which would be expected to allow for any liquid, dropping downwardly from the end of the wick 24 to ultimately continue to transit downward to the opposite end of the tube 22 to a toilet. Such is however not a siphon. Such however would not be an extension or a part of a siphon, and thus no true "syphonic-action" continuously from the proximal and distal end of his liquid delivery means in Dreifuss' device.

The Examiner's reliance on the secondary references is believed to be insufficient to cure the fatal defects in Dreifuss.

Klammsteiner fails to provide an arrangement wherein a siphon would be formed or would be expected to occur. This is readily seen by simple inspection even of Klammsteiner's figures wherein his exit nozzles (dispensing device 18) at a position substantially above the level of the inlet of his feed line 12', and this would require pressure order to operate so to expel any liquid from within his reservoir, upward through his feed line 12', and ultimately out through his exit nozzles. Realizing that such is an essential operative feature of his device, Klammsteiner includes a pair of "non-return" valves 7, 7' in-line with his feed line 12' so to ensure an anti-retraction benefit. The orientation of such, and their presence in-line would also confirm that no siphon could ever occur. Furthermore, it is the applicant's view that, at best, Klammsteiner could be relied on as providing a clip for retaining an exit nozzle or other dispensing device on the rim of a toilet. Even extending this to the Dreifuss reference what it best suggests the use of a clip at the end of Dreifuss' tube 22 and to secure it to the specific position on the rim of a toilet. However, such does not address nor overcome the shortcomings of Dreifuss noted above.

Ewing's dispensing device is also one which clearly requires pumping in order for it to be operative. Such is reflected in the construction of Ewing's device as Ewing clearly

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discloses that his device necessarily includes an intermediate check-valve in his fluid "dip tube" which is necessarily present in order to provide an improved spray as Ewing takes pains to discuss at col. 5, lines 28 – 37, reproduced here.

.....
We have found that squeeze bottle operation develops
a superior spray if liquid is held in the dip tube practically
right at the discharge orifice. In squeezing a squeeze bot- 30
tle, a good deal of air and compression escapes and is
lost before the liquid is pumped up the dip tube and atom-
ized. This disadvantage is avoided through the introduc-
tion of a valve as at 40, so that there is not only a better
and quicker spray, but it also permits making a squeeze 35
bottle of substantially greater height and still productive
of a spraying action.

It is clear then from the foregoing that although Ewing's dip tube is "U-shaped" it necessarily requires a check valve intermediate its ends, which would cease any siphoning benefit. Ewing also expressly notes that his device operates by compressing the liquid contents of this device, which is required generate pressure to both open the check valve and to provide an effective spray pattern. Ewing fails to include any siphon element, and thus cannot be properly held as anticipating the currently claimed invention. At best, while Ewing may note the possible utility of plastics tubing as being possibly useful components, Ewing does not overcome the fatal shortcomings in the Dreifuss reference discussed above.

The Examiner's attention is also respectfully directed to the subject matter of the newly presented claims which are believed to still further distinguish over the prior art references of record.

Accordingly reconsideration of the propriety of the instant rejection in view of the combined Dreifuss, Klammsteiner and Ewing documents, and its withdrawal, is solicited.

Regarding the rejection of claim 17 under 35 USC 103(a) in view of US 954426 to Dreifuss, in view of US 5457822 to Klammsteiner and further in view of MoodyCliffe (US 2004/0049839):

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Returning now to the outstanding rejection, the applicant first points out that it is believe that the outstanding rejection should be vacated in light of the currently amended claim 1, which is believed to be allowable over the prior art. Thus, claim 17 which is dependent from claim 1 is believe to be *de facto*, also allowable over the prior art of record.

Alternately the applicant points out that it appears that the true and correct teaching of the MoodyCliffe document is one which is actually rather circumscribed to be directed by the stated "discovery" of MoodyCliffe which states first at page 1

[0012] The present inventors have discovered that, by substantially increasing the viscosity of the liquid composition, these undesirable effects can be reduced substantially, or even eliminated.

and then later elucidates again at page 1

[0013] Thus, in accordance with the present invention, there is provided a lavatory freshening and/or cleaning system comprising a dispenser for dispensing a liquid composition from under the rim of a lavatory bowl, said liquid composition having a viscosity greater than 2 500 mPa s.

[0014] The viscosity is preferably less than 6 000 mPa s and more preferably within the range 3 000 to 5 000 mPa s. The most preferred value is about 3 500 mPa s.

and indeed MoodyCliffe only demonstrates that a liquid composition having a viscosity of 3500 mPa s was produced, in an apparent sole example composition. However, MoodyCliffe very clearly omits any demonstration of the fluid flow properties or characteristics of his example composition any specific apparatus or device. Thus, it is quite unclear that a skilled artisan would consider MoodyCliffe's compositions to be useful, especially those as being in MoodyCliffe's preferred viscosity range of 3000 – 5000 mPa s in any type of a device which would use a capillary or siphon as a fluid delivery means. Moody's sole suggestion of a liquid type lavatory dispensing device is

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that disclosed in WO 99/66139, which includes a pad or a plate having capillary channels along which pad or plate MoodyCliffe's liquid compositions of "substantially increased" viscosity may flow. Such a broad, flat plate or pad does not suggest a fluid flow conduit however, but rather a laminar surface across which a skilled artisan would expect MoodyCliffe's compositions to form a film or sheet. In view of at least these features, MoodyCliffe's purported teachings appear to be inapplicable as proper support of the present rejection lodged by the Examiner.

Applicant points out that MoodyCliffe's liquid compositions of "substantially increased" viscosity are at best, suggested as being flowable across a broad, flat plate or pad of a liquid type lavatory dispensing device is that disclosed in WO 99/66139, which however does not suggest that MoodyCliffe's liquid compositions would be useful in a fluid flow conduit, or would be flowable under a syphonic effect. Thus absent a specific demonstration that MoodyCliffe's liquid compositions would be flowable under a syphonic effect is an overextension of what MoodyCliffe actually demonstrates, which is not flow under a syphonic effect. To achieve such a flow effect in a thickened liquid may be said to be surprising, as such would be counterintuitive to a skilled artisan, particularly where capillary action may be relied upon in any fluid conduit to having an elongated, tubular configuration or form for example, particularly where such may have a generally circular cross-section. The Examiner's attention is directed to applicants specification and in particular the embodiment depicted on Fig. 3.

Further, the applicant notes that MoodyCliffe's ostensibly useful compositions would be those limited to a viscosity range of 3000 – 5000 mP s, which appears to be several times more viscous than the two compositions demonstrated by the present applicant at para. [0077] and [0078] of their published application, US 2007/0204387 A1. Said demonstrated compositions exhibit viscosities of 889 mP s, and 117 mP s, which are quite a bit below the lower threshold viscosity of 3000 mP s required by MoodyCliffe.

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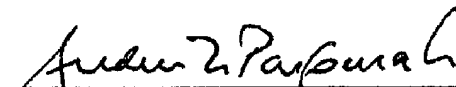
In view of the foregoing then, it is believed that the subject matter of claim 17 is unobvious over the combined prior art references, and that the rejection under 35 USC 103(a) is properly withdrawn.

Accordingly, reconsideration of the propriety of the outstanding rejection of the specification, and of all of the claims is requested.

CONDITIONAL AUTHORIZATION FOR FEES

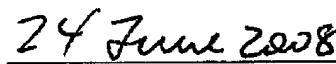
Should any further fee be required by the Commissioner in order to permit the timely entry of this paper, the Commissioner is authorized to charge any such fee to Deposit Account No. 14-1263.

Respectfully Submitted;



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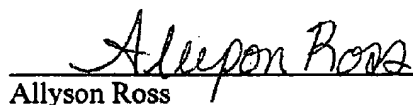
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